



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|----------------------|------------------|
| 09/834,573 | 04/12/2001 | Robert T. Baum | Bell-31 (00-VE23.27) | 4253 |

7590 09/20/2005

STRAUB & POKOTYLO
620 Tinton Avenue
Bldg. B 2nd Floor
Tinton Falls, NJ 07724-3260

EXAMINER

FOX, JAMAL A

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/834,573

Applicant(s)

BAUM ET AL.

Examiner

Jamal A. Fox

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 22-24, 33, 34, 38 and 43 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-32, 35-37 and 40-42 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 8-10, 19, 21, 25, 26 and 39 is/are rejected.
- 7) ☒ Claim(s) 3, 5-7, 11-18, 20, 44 and 45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. Figure 36 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. Ref. signs 3522, 3524, 3525, 3526 and 3527 of Fig. 36 are the same as ref. signs 214, 216, 218a, 218b and 220 respectively of Fig. 2B of U.S. Patent No. 6,765,866. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

Art Unit: 2664

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 2, 4, 8-10, 19, 21, 25, 26 and 39 rejected under 35 U.S.C. 102(e) as being anticipated by Nikolich et al. (U.S. Patent No. 6,826,195).

Referring to claim 1, Nikolich et al. discloses for use in an edge device (Hub, Fig. 5) of a transport network (Internet, Fig. 5 and Fig. 60), a method for processing data (processing, col. 2 lines 5-10, col. 5 lines 28-37 and col. 6 lines 30-35), received from a first customer device (Fig. 14 ref. sign 558) via access facilities (Fig. 14, ref. signs 554, 556, 560 and 562), addressed to a second customer device (Fig. 14, ref. sign 572), the method comprising: a) terminating (removed, col. 10 lines 31-45), with a physical interface (MCC, Fig. 14 ref. sign 574 and respective portions of the spec.), a link (channel, col. 10 lines 35-45) of the access facilities; b) associating at least one logical interface (logical port, col. 6 lines 15-26) with the physical interface (port, col. 6 lines 15-26); c) associating customer context information (field, col. 6 lines 15-20) with the logical interface (logical port, col. 6 lines 15-26); and d) upon receiving the data, i) removing (removed, col. 6 line 65) a part of layer 2 address (Ethernet header, col. 6 line 65), information from the data to generate resulting data, and ii) adding (added, col. 6 line 65) the customer context information to the resulting data to generate modified data (data packet, col. 6 line 66).

Referring to claim 2, Nikolich et al. discloses the method of claim 1 wherein the customer context information added (added, col. 6 line 65) to the resulting data is added

in the place of the at least a part of the layer 2 address (Ethernet header, col. 6 line 65) information removed (removed, col. 6 line 65).

Referring to claim 4, Nikolich et al. discloses the method of claim 1 further comprising: f) saving, in association with the logical interface, layer 2 source address information (Fig. 13 ref. sign 516 and respective portions of the spec.) of the data.

Referring to claim 8, Nikolich et al. discloses the method of claim 1 wherein at least a portion of the customer context information uniquely identifies the logical interface (logical port, col. 6 lines 15-26).

Referring to claim 9, Nikolich et al. discloses the method of claim 1 wherein at least a portion of the customer context information identifies a class of service (class of service, col. 3 lines 25-30 and col. 8 lines 21-32) level.

Referring to claim 10, Nikolich et al. discloses the method of claim 1 wherein at least a portion of the customer context information identifies a quality of service (quality of service, col. 3 lines 25-30 and col. 8 lines 21-32) level.

Referring to claim 19, Nikolich et al. discloses the method of claim 1 wherein the layer 2 information of the data is part of an Ethernet header (Ethernet header, col. 6 lines 53-col. 7 line 4), and wherein the customer context information (BAS header, col. 6 line 65-col. 7 line 4) replaces a value in a layer 2 source address field of the Ethernet header.

Referring to claim 21, Nikolich et al. discloses for use in a system including a transport network (Internet, Fig. 5 and Fig. 60), the transport network (Internet, Fig. 5) including at least two edge devices (Fig. 3 ref signs 48 and 50; Fig. 7 ref. signs 332 and

Art Unit: 2664

338), each of the at least two edge devices being accessible to customer devices (Fig. 5, IP Data, IP Video, IP Voice and IP FAX) via access facilities (Fig. 5, HFC link 278 and respective portions of the spec.) and having logical (logical, col. 4 lines 5-9) interfaces, each logical interface uniquely associated with a customer device (Fig. 5, IP Data, IP Video, IP Voice and IP FAX), a machine readable medium (software, col. 3 lines 21-40) having stored thereon:

a) data (data, col. 4 lines 1-5) received from a first customer device (Fig. 5, IP FAX and respective portions of the spec.) and addressed to a second customer device (Fig. 5, IP Data and respective portions of the spec.); and

b) customer context information (QoS/CoS, col. 3 lines 25-30) associated with the logical (logical, col. 4 lines 5-9) interface uniquely associated with the first customer device,

wherein at least a part of the customer context information identifies, at least one of (A) the logical interface uniquely (logical port, col. 6 lines 15-26), (B) a customer uniquely (Fig. 13 and respective portions of the spec.), and (C) a service level (class of service, col. 3 lines 25-30 and col. 8 lines 21-32).

Referring to claim 25, Nikolich et al. discloses the machine readable medium of claim 21 further having stored thereon:

c) carrier information used to forward (Fig. 13, Forwarding Info field 520 and respective portions of the spec.) the data, across the transport network, to an edge device associated with the second customer device.

Referring to claim 26, Nikolich et al. discloses the machine readable medium of claim 25 wherein the carrier information (Fig. 13 ref. sign 500) includes an address of the edge device associated with the second customer device, and wherein the address of the edge device is based on the address of the second customer device and at least a part of the customer context information (destination data, chassis, slot and port information, col. 6 line 67 – col. 7 line 1).

Referring to claim 39, Nikolich et al. discloses for use in an edge device (Hub, Fig. 5) of a transport network (Internet, Fig. 5 and Fig. 60), an aggregation unit for processing (processing, col. 2 lines 5-10, col. 5 lines 28-37 and col. 6 lines 30-35) data, received from a first customer device (Fig. 14 ref. sign 558) via access facilities (Fig. 14, ref. signs 554, 556, 560 and 562), addressed to a second customer device (Fig. 14, ref. sign 572), the aggregation unit comprising:

- a) a physical interface (MCC, Fig. 14 ref. sign 574 and respective portions of the spec.) for terminating a link (channel, col. 10 lines 35-45) of the access facilities;
- b) at least one logical interface (logical port, col. 6 lines 15-26) associated with the physical interface (port, col. 6 lines 15-26);
- c) a storage device (Fig. 1, DRAM 568 and SRAM 570 and respective portions of the spec.) for storing customer context information (field, col. 6 lines 15-20) associated with the logical interface (logical port, col. 6 lines 15-26); and
- d) a means for, upon receiving the data,

Art Unit: 2664,

i) removing (removed, col. 6 line 65) at least a part of layer 2 address (Ethernet header, col. 6 line 65) information from the data to generate resulting data, and

ii) adding (added, col. 6 line 65) the customer context information to the resulting data to generate modified data (data packet, col. 6 line 66).

Allowable Subject Matter

4. Claims 27-32, 35-37 and 40-42 are allowed.

5. Claims 3, 5-7, 11-18, 20, 44 and 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 9, 10, 19 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argued that Fig. 14 ref. signs 558 and 572 cannot be characterized as customer devices. However, one skilled in the art would recognize that ref. sign 558 processes customer packets (col. 6 line 63 - col. 7 line 4) and ref. sign 572 provides customer connections (col. 6 lines 45-50).

Applicant argued that the MCC does not terminate the buses 554, 556 and 560. However, one skilled in the art would recognize that the MCC terminates that channel which is a link of the bus (col. 10 lines 35-45).

Conclusion

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:


(571) 273-8300, (for formal communications intended for entry)

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-3143. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 2600 Customer Service whose telephone number is (571) 272-2600.


Jamal A. Fox


WELLINGTON CHIN
ADVISORY PATENT EXAMINER